

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1-2. (Canceled)

3. (Currently Amended) A light-emitting device comprising:

a pixel comprising:

a light-emitting element,

a first transistor for determining a value of a current flowing to the light-emitting element,

a second transistor for determining a light emission or non light emission of the light-emitting element depending on a video signal input through a signal line,

a third transistor for controlling an input of the video signal, and

a fourth transistor for forcing the light-emitting element into a non-emission state irrelevant from the video signal,

wherein the light-emitting element, the first transistor, and the second transistor are connected in series between a first power line and a counter electrode of the light-emitting element, [[and]]

wherein a source of the first transistor is connected to the first power line and a gate electrode of the first transistor is connected to a second power line so that a voltage between the gate electrode and the source of the first transistor is constantly fixed,

wherein the first transistor has a channel length longer than a channel width, and the second transistor has a channel length equal to or shorter than a channel width, and

wherein a ratio of the channel length to the channel width of the first transistor is 5 or more.

4-14. (Canceled)

15. (Previously Presented) The light-emitting device according to claim 3, wherein the first transistor and the second transistor are identical in conductivity.

16. (Canceled)

17. (Previously Presented) The light-emitting device according to claim 3, wherein the first transistor is a depletion type transistor.

18-27. (Canceled)

28. (Previously Presented) The light-emitting device according to claim 3, wherein the light-emitting device is incorporated into at least one selected from the group consisting of a cellular phone, a mobile computer, a game machine, an electronic book, a video camera, a digital camera, a goggle display, a display device, and a navigation system.

29-31. (Canceled)

32. (Currently Amended) The light-emitting device according to claim 3, wherein [[the]] an electric potential of the second power line is fixed.

33. (Canceled)

34. (Previously Presented) The light-emitting device according to claim 3, wherein the signal line, the first power line, and the second power line are provided in parallel with each other, and the first power line is provided between the signal line and the second power line.

35. (Previously Presented) The light-emitting device according to claim 3, wherein the second power line has an electric potential so that the first transistor operates in a saturation region when the second transistor is in an on-state.

36. (Currently Amended) A light-emitting device comprising:
a pixel comprising:
a light-emitting element,
a first transistor for determining a value of a current flowing to the light-emitting element, and
a second transistor for determining a light emission or non light emission of the light-emitting element depending on a video signal input through a signal line,
wherein the light-emitting element, the first transistor, and the second transistor are connected in series between a first power line and a counter electrode of the light-emitting element, [[and]]
wherein a source of the first transistor is connected to the first power line and a gate electrode of the first transistor is connected to a second power line so that a voltage between the gate electrode and the source of the first transistor is constantly fixed,
wherein the first transistor has a channel length longer than a channel width, and the second transistor has a channel length equal to or shorter than a channel width, and
wherein a ratio of the channel length to the channel width of the first transistor is 5 or more.

37. (Currently Amended) A light-emitting device comprising:
a pixel comprising:
a light-emitting element,
a first transistor for determining a value of a current flowing to the light-emitting element,
a second transistor for determining a light emission or non light emission of the light-emitting element depending on a video signal input through a signal line, and
a third transistor for controlling an input of the video signal,

wherein the light-emitting element, the first transistor, and the second transistor are connected in series between a first power line and a counter electrode of the light-emitting element, [[and]]

wherein a source of the first transistor is connected to the first power line and a gate electrode of the first transistor is connected to a second power line so that a voltage between the gate electrode and the source of the first transistor is constantly fixed,

wherein the first transistor has a channel length longer than a channel width, and the second transistor has a channel length equal to or shorter than a channel width, and

wherein a ratio of the channel length to the channel width of the first transistor is 5 or more.

38. (Currently Amended) An element substrate comprising:

a pixel comprising:

a pixel electrode;

a first transistor for determining a value of a current flowing to the pixel electrode, and

a second transistor for determining a supply or non-supply of [[a]] the current to the pixel electrode depending on a video signal input through a signal line,

wherein the first transistor and the second transistor are connected in series between a first power line and the pixel electrode, [[and]]

wherein a source of the first transistor is connected to the first power line and a gate electrode of the first transistor is connected to a second power line so that a voltage between the gate electrode and the source of the first transistor is constantly fixed,

wherein the first transistor has a channel length longer than a channel width, and the second transistor has a channel length equal to or shorter than a channel width, and

wherein a ratio of the channel length to the channel width of the first transistor is 5 or more.

39. (Previously Presented) The light-emitting device according to claim 36, wherein the first transistor and the second transistor are identical in conductivity.

40. (Previously Presented) The light-emitting device according to claim 36, wherein the first transistor comprises a depletion type transistor.

41-42. (Canceled)

43. (Previously Presented) The light-emitting device according to claim 36, wherein the light-emitting device is incorporated into at least one selected from the group consisting of a cellular phone, a mobile computer, a game machine, an electronic book, a video camera, a digital camera, a goggle display, a display device, and a navigation system.

44. (Previously Presented) The light-emitting device according to claim 36, wherein the signal line, the first power line, and the second power line are provided in parallel with each other, and the first power line is provided between the signal line and the second power line.

45. (Previously Presented) The light-emitting device according to claim 36, wherein the second power line has an electric potential so that the first transistor operates in a saturation region when the second transistor is in an on-state.

46. (Previously Presented) The light-emitting device according to claim 37, wherein the first transistor and the second transistor are identical in conductivity.

47. (Previously Presented) The light-emitting device according to claim 37, wherein the first transistor comprises a depletion type transistor.

48-49. (Canceled)

50. (Previously Presented) The light-emitting device according to claim 37, wherein the light-emitting device is incorporated into at least one selected from the group consisting of a cellular phone, a mobile computer, a game machine, an electronic book, a video camera, a digital camera, a goggle display, a display device, and a navigation system.

51. (Previously Presented) The light-emitting device according to claim 37, wherein the signal line, the first power line, and the second power line are provided in parallel with each other, and the first power line is provided between the signal line and the second power line.

52. (Previously Presented) The light-emitting device according to claim 37, wherein the second power line has an electric potential so that the first transistor operates in a saturation region when the second transistor is in an on-state.

53. (Previously Presented) The element substrate according to claim 38, wherein each of the first transistor and the second transistor has a P-type conductivity, and a threshold value of the first transistor is higher than that of the second transistor.

54. (Previously Presented) The element substrate according to claim 38, wherein each of the first transistor and the second transistor has an N-type conductivity, and a threshold value of the first transistor is lower than that of the second transistor.

55. (Previously Presented) The element substrate according to claim 38, wherein the first transistor comprises a depletion type transistor.

56-57. (Canceled)

58. (Previously Presented) The element substrate according to claim 38, wherein the element substrate is incorporated into at least one selected from the group consisting of a cellular phone, a mobile computer, a game machine, an electronic book, a video camera, a digital camera, a goggle display, a display device, and a navigation system.

59. (Currently Amended) The ~~light-emitting device~~ element substrate according to claim 38, wherein the signal line, the first power line, and the second power line are provided in parallel with each other, and the first power line is provided between the signal line and the second power line.

60. (Currently Amended) The ~~light-emitting device~~ element substrate according to claim 38, wherein the second power line has an electric potential so that the first transistor operates in a saturation region when the second transistor is in an on-state.

61. (New) An element substrate comprising:

- a first power line;
- a second power line;
- a scan line;
- a signal line;
- a pixel electrode;
- a first transistor;
- a second transistor; and
- a third transistor,

wherein one of a source and a drain of the first transistor is connected to the pixel electrode,

wherein one of a source and a drain of the second transistor is connected to the other of the source and the drain of the first transistor,

wherein the other of the source and the drain of the second transistor is connected to the first power line,

wherein a gate electrode of the first transistor is connected to the second power line,

wherein one of a source and a drain of the third transistor is connected to a gate electrode of the second transistor,

wherein the other of the source and the drain of the third transistor is connected to the signal line,

wherein a gate electrode of the third transistor is connected to the scan line,

wherein the first transistor has a channel length longer than a channel width, and the second transistor has a channel length equal to or shorter than a channel width, and

wherein a ratio of the channel length to the channel width of the first transistor is 5 or more.

62. (New) The element substrate according to claim 61, wherein the first transistor and the second transistor are identical in conductivity.

63. (New) The element substrate according to claim 61, wherein the first transistor is a depletion type transistor.

64. (New) The element substrate according to claim 61, wherein the element substrate is incorporated into at least one selected from the group consisting of a cellular phone, a mobile computer, a game machine, an electronic book, a video camera, a digital camera, a goggle display, a display device, and a navigation system.

65. (New) The element substrate according to claim 61, wherein the electric potential of a second power line is fixed.

66. (New) The element substrate according to claim 61, wherein the scan line and the second power line are provided in parallel with each other.

67. (New) The element substrate according to claim 61, wherein the second power line has an electric potential so that the first transistor operates in a saturation region when the second transistor is in an on-state.

68. (New) The element substrate according to claim 61, wherein the one of the source and the drain of the first transistor is connected to the pixel electrode via a resistor.

69. (New) An element substrate comprising:

- a first power line;
- a second power line;
- a scan line;
- a signal line;
- a pixel electrode;
- a first transistor;
- a second transistor; and
- a third transistor,

wherein one of a source and a drain of the first transistor is connected to the first power line,

wherein one of a source and a drain of the second transistor is connected to the other of the source and the drain of the first transistor,

wherein the other of the source and the drain of the second transistor is connected to the pixel electrode,

wherein a gate electrode of the first transistor is connected to the second power line,

wherein one of a source and a drain of the third transistor is connected to a gate electrode of the second transistor,

wherein the other of the source and the drain of the third transistor is connected to the signal line,

wherein a gate electrode of the third transistor is connected to the scan line,

wherein the first transistor has a channel length longer than a channel width, and the second transistor has a channel length equal to or shorter than a channel width, and

wherein a ratio of the channel length to the channel width of the first transistor is 5 or more.

70. (New) The element substrate according to claim 69, wherein the first transistor and the second transistor are identical in conductivity.

71. (New) The element substrate according to claim 69, wherein the first transistor is a depletion type transistor.

72. (New) The element substrate according to claim 69, wherein the element substrate is incorporated into at least one selected from the group consisting of a cellular phone, a mobile computer, a game machine, an electronic book, a video camera, a digital camera, a goggle display, a display device, and a navigation system.

73. (New) The element substrate according to claim 69, wherein the electric potential of a second power line is fixed.

74. (New) The element substrate according to claim 69, wherein the second power line has an electric potential so that the first transistor operates in a saturation region when the second transistor is in an on-state.

75. (New) The element substrate according to claim 69, wherein the other of the source and the drain of the second transistor is connected to the pixel electrode via a resistor.